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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,920	11/19/2003	Kurt W. Kramarz	937-1533	6420

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EXAMINER	
KEYS, ROSALYND ANN	
ART UNIT	PAPER NUMBER
1621	
MAIL DATE	DELIVERY MODE
08/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/716,920	KRAMARZ ET AL.	
	Examiner	Art Unit	
	ROSALYND KEYS	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9, and 12-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-9 and 12-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1, 3-9, and 12-28 are pending.

Claims 1, 3-9, and 12-28 are rejected.

Claims 2, 10 and 11 are cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-9, and 12-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al. (US 4,426,542) in view of Kwok et al. (US 5,801,292), Starks et al. (Phase Transfer Catalysis, 1994, pp. 482-488), Halpern et al. (Spec. Publ.-R. Soc. Chem, 1999, pp. 30-39) or Judge et al. (UK 1 547 856), for the reasons given in the previous office action, mailed January 29, 2008.

Response to Arguments

6. Applicant's arguments filed May 6, 2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the instant case the Examiner only uses knowledge, i.e., the use of a phase transfer catalyst to make an alcohol via an aldol condensation and hydrogenation

(Barker et al.) and the known use of the claimed aldehydes in a cross-aldol condensation (Kwok et al.), which was within the level of ordinary skill at the time the claimed invention was made.

The Applicants submit that it is critical to Kwok et al. that hydrated MgO be employed as the catalyst.

This argument is not persuasive because although the use of a MgO catalyst is critical for the invention of Kwok et al. it is not critical for a cross-aldol condensation reaction, the reason for which the Examiner is applying Kwok et al. as a reference. As is known in the art and taught by both Barker et al. and Kwok et al. aldol condensation reactions, including cross-aldol condensation reactions can be conducted in the presence of other catalyst besides MgO catalysts, for example alkali catalysts are known to catalyze aldol condensation reactions (see column 3, lines 51-53 of Barker et al. and column 1, lines 58-65 of Kwok et al.). The Examiner applied Kwok et al. as a reference for its teaching that it is commonly known that the aldol condensation reaction may be used not only for the condensation of a given aldehyde, but for the combination of different aldehydes, producing a so-called "cross aldol", provided that at least one of the aldehydes contains an alpha hydrogen (see entire disclosure, in particular column 1, lines 58-67). Thus, the Examiner concluded that based upon the combined teaching of Barker et al. and Kwok et al., one having ordinary skill in the art at the time the invention was made would have found it obvious that the aldol condensation process disclosed by Barker et al. could be carried out utilizing different aldehydes, as disclosed by Kwok et al., including those aldehydes as claimed, with the expectation of obtaining the desired unsaturated aldehydes via a cross aldol condensation reaction, since Kwok et al. teach that aldol condensations can be conducted on a given aldehyde as well as a combination of different aldehydes. Thus, the Examiner disagrees

that the ordinary skilled person having knowledge of Kwok et al. would be lead directly away from using mixed aldehydes in a cross-aldol reaction in which a water soluble quaternary ammonium or phosphonium salt was employed as the water soluble phase transfer catalyst.

For the above reasons, the Examiner maintains the rejection of claims 1, 3-9, and 12-28 under 35 U.S.C. 103(a) as being unpatentable over Barker et al. (US 4,426,542) in view of Kwok et al. (US 5,801,292), Starks et al. (Phase Transfer Catalysis, 1994, pp. 482-488), Halpern et al. (Spec. Publ.-R. Soc. Chem, 1999, pp. 30-39) or Judge et al. (UK 1 547 856).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROSALYND KEYS whose telephone number is (571)272-0639.

The examiner can normally be reached on M, R & F 5:30-7:30 am & 1-5 pm; T & W 5:30 am-4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROSALYND KEYS/
Primary Examiner, Art Unit 1621

August 1, 2008